IBM Aspera Orchestrator

File-based workflow automation and orchestration

Highlights

Automates existing file-based workflows to provide accurate file processing, improving productivity and reducing errors in file transfer operations.

Highly scalable for high-volume workflows, processing hundreds of media files and thousands of metadata files per hour

Robust orchestration includes complex logical branching, automatic recovery for interrupted steps and configurable retry behavior on errors or failures

Designed to provide 100 percent reliable, high-speed transfer with Aspera FASP® technology, guaranteeing the fastest data transfer acceleration.

IBM® Aspera® Orchestrator enables advanced workflow automation and integration capabilities, allowing organizations to build efficient, predictable file process pipelines that interconnect business units and external partners. With Aspera Orchestrator, files can be directed, processed, and redirected with easy-to-define rules based on your organization's workflows and using existing IT infrastructure. Aspera's automation capabilities streamline complex workflows and ensures each processing step is accurately performed, helping organizations manage high-speed file transfer and large file transfers seamlessly.

Visually Define and Automate Executions of Your Existing Workflows

Aspera Orchestrator's interactive graphical designer simplifies the process of composing execution streams based on your organization's existing workflows. Use drag-and-drop visual elements to define the logical sequences, inputs, action types, outputs, and dependencies, grouping them into reusable templates. The graphical interface allows you to monitor active workflows in near real-time, while also drilling down into detailed histories of operations for better visibility in secure file transfer processes.

An Intelligent Decision Engine with a Rich Library of Plug-ins

To automate workflows and ensure timely content delivery under fixed schedules, Aspera Orchestrator integrates a logical execution engine with third-party plug-ins for asset transformation, quality control, and other functions. Its conditional rules engine allows inputs to trigger subsequent actions on the fly, such as prompting for human input if needed. An expanded library of plug-ins covers leading encoding, transcoding, watermarking, and verification products, with full support for file format standards such as ADI, MXF, AS-11, DPP file formats, and FIMS. This enhances the system's ability to handle the managed file transfer tasks across diverse systems.

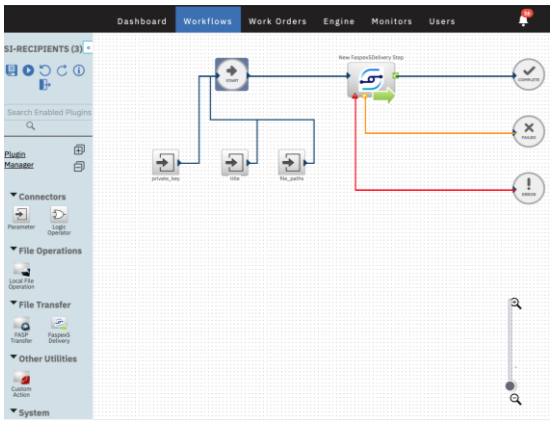

Image for workflow designer in IBM Orchestrator

Typical Applications

- **High-Volume Processing and Transformation:** Scales fluidly and reliably for the extreme processing required by big data workflows, enabling fast file transfers.
- **Secure Contribution and Distribution:** Provides built-in secure transfers between suppliers and receivers, including user and endpoint authentication, encryption, and integrations with antivirus technologies, solving slow file transfer and security concerns in global file transfer scenarios.
- **Ultra High-Speed Ingest and Upload:** Integrated with high-speed storage platforms for scalable performance across long-haul networks, capable of speeds exceeding 10 Gbps for accelerated file transfers.

Support High-Volume Workflows

Workflow orchestration systems depend on the predictable delivery of files to feed their processing pipeline. To provide uninterrupted data flow regardless of system load, Aspera Orchestrator relies on Aspera FASP—Aspera's patented bulk data transfer acceleration technology that ensures high-speed data delivery regardless of file size, transfer distance, or network conditions.

Key Features

- Easy-to-use graphical designer enables users to create and test sophisticated file-based workflows, promoting efficient file transfer and system management.
- Powerful rules engine logically executes workflow steps, binding inputs to actions on the fly with support for parallel execution and optimal use of available bandwidth.
- Integrated with Aspera FASP for high-speed transfer regardless of file size, transfer distance, or network conditions, maximizing bandwidth optimization.
- Plug-ins for asset transformation, quality control, media management, antivirus, scheduling, encryption, and more.

Plug-in Library Highlights

- **File Transformations**: BitMovin, Ateme, Cambria FTC, Harmonic's Carbon Coder (Rhozet), Digital Rapids Stream, FFmpeg, Telestream Flip Factory, BigBand, Sorenson Media Squeeze, AWS Elemental, Encoding.com, Handbrake.
- **Quality Control & Analysis**: Venera Technologies Quasar, Interra Systems Baton, Tektronix Cerify, XSD/XML, IRT MXF.
- **Media Management**: Dalet, Videomenthe's Eolementhe, OpenText's MediaBin, YouTube.

Powerful Engine for Logical, Conditional Execution

Inline validation options such as ADI, DPP, and antivirus are integrated in the Aspera transfer, enabling processing before, during, and after file transfer. Automatic restart on transmission failures, parallel execution support, and scalable performance for the most demanding workflows. Active/Active support distributes and balances execution across multiple Orchestrator instances in a high-availability configuration.

Integrated with Aspera FASP for Maximum Data Transfer Speeds

- Scales for the most demanding file-based workflows, offering precise bandwidth control to ensure that the full allocated bandwidth is utilized for fast file transfer.

- Virtually fail-proof data delivery : automatically resumes partial transfers, retries failed transfers, and falls back to HTTP for secure data exchange on restrictive networks.

Features and Benefits

- Easy-to-use interfaces for defining and monitoring complex workflows through a drag-and-drop browser-based interface, making large file transfers and operations efficient and easy.

- Templates can be exported and imported across Aspera Orchestrator instances, and sub-sequences can be reused in new workflows for repeatable, consistent operations.

- Automation of restoration from a snapshot and scheduling of snapshots ensure high-volume workflows are maintained with minimal disruption.

- Processes can be distributed over multiple globally dispersed instances. The master controls the end-to-end workflow, while execution of the sub-workflows is delegated to the remote nodes.

- Integrated Active Directory/LDAP eases user configuration and management.

- Execution dashboard and notifications enable near real-time workflow oversight.

Supported Platforms

- **Operating Systems**: Linux, Windows
- **Ad insertion :** SeaChange
- Antivirus Symantec, McAfee, Sophos, ClamAV
- **Scheduling and billing** : Xytech, SintecMedia
- **Database / Stores** :Influx DB, MongoDB, Microsoft SQL Server, MySql, iMeet Central
- **Encryption** : PGP, Symantec
- **Email and messaging** : Microsoft Exchange, GMail, Slack
- **IT management** : Microsoft System Center Management (SCOM) Notification
- **Archiving** : AWS Glacier, Diva Archives
- **IBM Applications** : MQ, Watson Video Enrichment, Watson Speech To Text and Text To Speech
- **Cloud Operations** : AWS S3, AWS SimpleDB, AWS SNS, AWS SQS, AWS SWF

About IBM Aspera

IBM Aspera offers next-generation transport technologies that move the world's data at maximum speed regardless of file size, transfer distance and network conditions. Based on its patented, Emmy® award-winning FASP® protocol, Aspera software fully utilizes existing infrastructures to deliver the fastest, most predictable file-transfer experience. Aspera's core technology delivers unprecedented control over bandwidth, complete security and uncompromising reliability. Organizations across a variety of industries on six continents rely on Aspera software for the business-critical transport of their digital assets

For more information

To learn more about IBM Aspera contact your IBM representative or IBM Business Partner, or visit ibm.com/products/aspera

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